

ZONE 2, CHOBHAM FARM Leyton Road London E15

London Borough of Newham

Report on an archaeological evaluation

September 2017



**LAND AT ZONE 2
CHOBHAM FARM
LEYTON ROAD
STRATFORD
E15**

Site Code: LYT17
NGR 538552: 184999
OASIS reference molas1-293875

Planning reference: 12/00146/FUL
Condition Number: AZ94

Report on archaeological evaluation

Sign-off history:

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1	23.08.17	Tony Mackinder (Senior Archaeologist)	Harry Clarke (Project Manager)	Draft for client comment
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Summary

This report presents the results of an archaeological evaluation carried out by MOLA at Zone 2 Chobham Farm, Leyton Road, Stratford E15. The report was commissioned from MOLA by the client Higgins Construction.

In accordance with the Written Scheme of Investigation (MOLA 2017) dated 19/02/17, six evaluation trenches were excavated on the site between 31 July and 18 August 2017.

The evaluation found extensive railway tracks and other infrastructure that form part of the 19th century 'Stratford Works' that began in the 1840's and continued into the 1960's.

The report concludes that 19th century archaeological remains will be impacted by any redevelopment that will require their removal as obstructions to the new piles and ground beams required for the new residential units.

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1 Introduction

1.1 Site background

- 1.1.1 An archaeological evaluation was carried out by MOLA at the site of Land At Zone 2, Chobham Farm, Leyton Road, Stratford, E15 ('the site') between 31/07/17 and 18/08/17 (see Fig 1). This document is the Report on that work.
- 1.1.2 The site comprises of an area of vacant land having previously been used as part of the Olympic facilities in 2012. The site is bounded by Prospect Row to the East, Penny Brookes Street to the South and the rail lines to the West. The centre of the site lies at National Grid reference 538552 184999. Ground level across the site lies at approximately c 6.30m OD.
- 1.1.3 Although no written Archaeological Assessment was prepared for this site (Zone 2), a previous archaeological post-excavation assessment of the area contained general information on the natural geology, archaeological and historical background relating to the area (PCA 2010).

1.2 Planning background

- 1.2.1 The planning and legislative framework in which the evaluation took place was fully set out in the *Written Scheme of Investigation* which formed the project design for the evaluation (see Section 1.2. MOLA 2017).
- 1.2.2 The total development site (comprising of six Zones) received planning permission (12/00146/FUL) and included Condition number AZ94 which states;

Development in each Zone shall not be commenced until a programme of archaeological investigation and work for that Zone has been submitted to and approved by the Local Planning Authority. The programme of archaeological work shall include: a written scheme of investigation for any undisturbed areas of the Site, not previously investigated during the archaeological investigations pursuant to the Olympic Consents, but which are to be disturbed as part of the Development has been submitted to and approved by the Local Planning Authority for approval. An undisturbed area shall include any area where the depth of excavation or foundations is greater than that assumed within the written scheme of investigations previously approved pursuant to the Olympic Consents; a watching brief for previously disturbed areas of the Site; and measures to be taken if significant archaeological finds are discovered.

The Development shall only take place in accordance with the approved detailed scheme pursuant to this condition. The archaeological works shall be carried out by a suitably qualified investigating body. This condition may be discharged on a Zonal basis.

Reason: To ensure that archaeological remains are properly investigated and recorded and to ensure that the development is in compliance with London Plan policy 7.8 (Heritage assets and archaeology) and LB Newham saved UDP policy EQ43 (Archaeology).

1.3 Scope of the evaluation

- 1.3.1 Evaluation is defined by Historic England as intended to provide information about the archaeological resource in order to contribute to the:

- formulation of an appropriate response or mitigation strategy to planning applications or other proposals which may adversely affect such archaeological remains, or enhance them; and/or
- formulation of a proposal for further archaeological investigations within a programme of research

- 1.3.2 An archaeological evaluation is a limited fieldwork exercise designed to test the conclusions of preliminary desk based work. It is not the same as full excavation.
- 1.3.3 The evaluation was carried out within the terms of the relevant Standard for evaluation specified by the Chartered Institute for Archaeologists (CIFA, 2014).
- 1.3.4 All work has been undertaken within the research priorities established in the Museum of London's *A research framework for London Archaeology*, (MOL 2002).
- 1.3.5 All work was undertaken within research aims and objectives established in the Written Scheme of Investigation for the evaluation (Section 2, MOLA 2017)

2 Topographical and historical background

2.1 Topography

- 2.1.1 The site was used as a car and lorry park for the 2012 Olympics and falls from c 6.44m OD to the north to c 6.27m OD to the south west.
- 2.1.2 Archaeological study of the area has recently been dominated by the development of the Olympic Park and the Stratford City Development. Between 2005 and 2009 a number of archaeological contractors undertook numerous site investigations and mitigation in advance of the development of the overall Olympic Park.

2.2 Archaeology

- 2.2.1 A description of the geology, archaeology and history of the surrounding area was provided in an earlier archaeological post-excavation assessment (PCA 2010) and can be related to the current Zone 2 works due to proximity. A brief resume is provided here:

Geology

- 2.2.2 The Geological Survey of Great Britain 1:50 000 scale map of the area (Sheet 256, 'North London') indicates that the site lies upon the Kempton Park Gravel which overlies a Upnor, Woolwich and Reading Formation of the Lambeth Group, composed of mottled clay with sand and pebble beds.

Prehistory

- 2.2.3 It is generally considered that the region in which the site resides would have been conducive to settlement across the prehistoric period, being located on the higher edge of the river valley. However, despite this the GLHER records only a small amount of evidence from across the entirety of the prehistoric period within the study area. As such it is considered that there is a low likelihood of evidence from the prehistoric era upon the site.
- 2.2.4 Evidence of a scattered Bronze Age cemetery (MOLA/PCA 2008), represented by seven possible cremation burials was found as part of the main Stratford City Development approximately 350m North of the current Zone 2 site.

Roman

- 2.2.5 During the Roman period the River Thames would have served as the main transport and trade route for Londinium while the River Lea would have granted access to the city's hinterland. It is also possible that the London to Colchester Roman Road crossed the area.
- 2.2.6 No direct evidence of Roman settlement activity has been uncovered adjacent to the site (PCA 2010). However, a crossing point over the River Lea is believed to have existed in the Stratford area, with it having been theorised that the line of one road may cross the site itself.

Saxon and Medieval

- 2.2.7 A low level of evidence from within the surrounding area suggests that during the early medieval/Saxon period the site continued to lie removed from the main settlements, with there being only waterway activity, cultivation soil and dumped deposits recorded in the surrounding area area.

- 2.2.8 John de Preston, a citizen and corder of London, founded the Manor of Chobham around AD 1329-31. It was named after Thomas de Chobham who held the title between 1343 and 1356. The estate was bought and sold many times, being held variously with Ruckholts Manor in Leyton, the manors of Burnells and West ham in West Ham and as part of the Henniker family estate. It is likely that it consisted of a centralised manorial farming complex with a layout of domestic and agricultural structures evolving over time. Therefore there is a low-moderate potential for medieval evidence on site.

Post-Medieval to Modern

- 2.2.9 For most of the post-medieval period the vast majority of the site would have been open fields, with only a very small number of structures or roads being present.
- 2.2.10 Early in the 17th century the area of Stratford was subject to post-medieval industrial development including the manufacturing of gunpowder and textiles, porcelain and printing resulted in a growth of the size of the settlement.
- 2.2.11 Chobham Manor is illustrated on John Rocque's map published 1744-46. A pathway leading from the manor to the eastern bank of the Channelsea River is clearly shown on the First Edition Ordnance Survey map of mid-19th century date and follows the alignment of a field boundary shown on Rocque's map, suggesting the path may have been present at this earlier time.
- 2.2.12 The Stratford Locomotive Works occupied most of the site from the mid-19th century (see front cover) and since this time the site has seen an expansion in development and a number of variations in the buildings that occupy the site.
- 2.2.13 There is a likelihood that evidence associated with the previous structures upon the site may survive, as previous archaeological investigations on the current site revealed evidence of structures of 19th and 20th century date that related to the development of the Stratford Railway Depot (See Trenches 22 and 23 in PCA, 2010). This work has recently been reported (Grosso and Thompson 2015).

3 Evaluation methodology

3.1 Field methodology

- 3.1.1 Six evaluation trenches were excavated across the site.
- 3.1.2 Site constraints included underground services and a live rail track to the West of the site; due to this, a 10m easement was put in place in consultation with Network Rail and the trenches were moved to avoid the live services.
- 3.1.3 Archaeological excavation was carried out in accordance with the *Written Scheme of Investigation* (MOLA 2017). Breaking out and excavation of each trench by a tracked excavator was monitored by a MOLA supervisor.
- 3.1.4 Trench locations were originally surveyed on site by MOLA surveyors though several modifications were necessary and these were subsequently tied to the OS grid by MOLA Geomatics.
- 3.1.5 Where referenced in this report (e.g. '13.45m OD'), levels relate to OS Ordnance Datum and were calculated from a GPS survey point set out by MOLA surveyors.

3.2 Recording methodology

- 3.2.1 A written and drawn record of all archaeological deposits encountered was carried out in accordance with the *Written Scheme of Investigation* (MOLA 2017).

3.3 Site archive

Number of trench record sheets	6
Number of overall location plans	1
Number of Context (SU) sheets	11
Number of photographs	55
Number of Plan sheets	19
Number of Sections	0

4 Results of the evaluation

4.1.1 For the locations of the trenches, please see *Fig 1* and *Fig 2*.

4.2 Trench 1

Dimensions	22.50m x 4.30m x 2.0m deep
Modern ground level	5.97m OD (S) to 6.44m OD (N)
Thickness of modern deposits	0.25m (tarmac) plus 0.75m make-up
Top of archaeological deposits	5.00m OD
Top of natural deposits	4.75m OD
Level of base of trench	4.50m OD (in slot)

4.2.1 Natural was orange gravel at c 4.75m OD.

4.2.2 This was overlain by c 0.25m of gravel that was associated with a series of 6 decayed timbers laid parallel. The spacing between them does not support the idea these are sleepers for rail tracks (also they appear to be very thin). They may be an attempt at ground consolidation possibly for the overlying concrete slab which due to the presence of rebar appears to be modern.



Photo: examples of the decayed timbers, Trench 1 looking east

4.3 Trench 2

Dimensions	22.50m E/W x 4.30m N/S x 1.48m deep
Modern ground level	5.91m OD (W) to 6.04 m OD (E)
Thickness of modern deposits	0.20m (tarmac) plus 0.45m make-up
Top of archaeological deposits	5.09m OD
Top of natural deposits	4.90m OD
Level of base of trench	4.56m OD (in slot)

- 4.3.1 Natural was orange gravel at 4.90m OD.
- 4.3.2 This was cut by four brick features; three [01], [02] and [03] were 19th century drain sumps, while the fourth [04] was in section and could not be investigated (see Fig 3).
- 4.3.3 Sealing these features was a concrete slab at c 5.09m OD that included a single railway track [05] running approximately east-west. On all of the OS maps of the site the railway tracks are running roughly north-south.



Photo: brick sumps and the railway track to the south (left), Trench 2 looking west

4.4 Trench 3

Dimensions	19.50m E/W x 3.0m N/S x 0.90m deep
Modern ground level	6.28m OD (E) to 6.16m OD (W)
Thickness of modern deposits	0.40m (tarmac) plus 0.50m concrete and make-up
Top of archaeological deposits	5.32m OD
Top of natural deposits	5.09m OD
Level of base of trench	4.80m OD (in slot)

- 4.4.1 Natural was orange gravel and was seen in a slot at 5.09m OD.
- 4.4.2 There was a concrete surface at 5.32m OD with three sets of railway tracks running north-south, the individual tracks were 1.40m apart. There was also a stone plinth/base [08] that was probably to support a lamp post (*Fig 4*).



Photo: example of a set of railway tracks and the stone plinth/base [08], Trench 3 looking south

4.5 Trench 4

Dimensions	22.30m (E/W) x 3.20m (N/S) x 0.80m deep
Modern ground level	6.30m OD (E) to 6.16m OD (W)
Thickness of modern deposits	0.30m (tarmac) plus 0.50m (concrete and make-up)
Top of archaeological deposits	5.36m OD
Top of natural deposits	4.80m OD
Level of base of trench	4.50m OD (in slot)

- 4.5.1 Natural was orange gravel and was seen in a slot at 4.80m OD.
- 4.5.2 There was a concrete surface at 5.36m OD with evidence of four sets of railway tracks running north-south, the individual tracks being 1.40m apart. There were also two brick bases [09] and [10] that were probably to support lamp posts (see *Fig 5*).



Photo: the railway tracks, Trench 4 looking west

4.6 Trench 5

Dimensions	26.50m (NW-SE) x 4.50m (NE-SW) x 0.95m deep
Modern ground level	6.10m OD (NW) to 6.32m OD (SE)
Thickness of modern deposits	0.30m (tarmac) plus 0.60m (concrete and make-up)
Top of archaeological deposits	5.52m OD to 5.38m OD
Top of natural deposits	5.00m OD
Level of base of trench	4.50mOD (in slot)

- 4.6.1 Natural was orange gravel and was seen in a slot at 5.00m OD.
- 4.6.2 There was a concrete surface between 5.52m OD and 5.38m OD with four sets of railway tracks running north-south, the individual tracks being 1.40m apart. There was also a brick drain sump [11] and a square metal plate, that may have covered another drain (*Fig 6*).



Photo: the railway tracks, Trench 5 looking North West

4.7 Trench 6

Dimensions	32m (N/S) x 4.40m (E/W) x 1.0m deep
Modern ground level	6.38m OD (E) to 6.27m OD (W)
Thickness of modern deposits	0.20m (tarmac) plus 0.80m (concrete and make-up)
Top of archaeological deposits	5.55m OD
Top of natural deposits	5.12m OD
Level of base of trench	4.34m OD (in slot)

- 4.7.1 Natural was orange clayey gravel and was seen in a slot at 5.12m OD.
- 4.7.2 There was a concrete surface at 5.55m OD with evidence of five sets of railway tracks running north-south, the individual tracks being 1.40m apart. There was evidence for a north-south brick wall [06] with a gap of unknown width between two separate fragments of this wall. There was also a stone plinth/base [07] that was probably to support a lamp post (see Fig 7).



Photo: the brick wall [06], Trench 6 looking south

4.8 The finds

4.8.1 The evaluation produced no finds.

4.9 The site as a whole

4.9.1 Five out of the six evaluation trenches show a concrete surfaces associated with sets of railway tracks. There was also a brick wall as well as several brick or stone plinths/bases that are probably for lamp posts. In Trench 2 several brick drain sumps were found below a concrete surface suggesting there was an earlier phases of activity present. This is backed up by some of the slots dug through the concrete surfaces to find the natural, which showed some unidentified brick work (and cast iron pipes) that are earlier activity.

4.9.2 Assessing the results from all the trenches, it appears that the whole site has evidence of a 19th to 20th century railway works and its associated infrastructure. No dating was kept as this railway works is clearly seen on various OS maps of the area, the earliest dating to 1867, where it is labelled 'Stratford Works'. Natural varied between 4.75m OD and 5.12m OD, possibly showing it was rising towards the south, though the level of 4.75m OD in Trench 1 may be suspect. Although Trench 1 did not have any evidence for railway tracks, the maps suggest they continued across the whole site; the deposit found with decayed timbers may be relatively modern ground raising event.

5 Archaeological potential

5.1 Answering original research aims

5.1.1 The *Written Scheme of Investigation* (MOLA 2017) identified several research aims;

- *What is the nature and level of natural topography?*

5.1.2 The natural is orange gravel (Kempton Park Gravel) that varied between 4.75m OD (Trench 1) and 5.12m OD (Trench 6), possibly showing it was rising towards the south.

- *What are the earliest deposits identified?*

5.1.3 The only deposits found relate to the known railway works and are 19th century in date.

- *What evidence is there for prehistoric activity and early landscape change?*

5.1.4 There is no evidence for prehistoric activity and early landscape change.

- *What evidence is there for Bronze Age and Iron Age occupation in the area?*

5.1.5 There is no evidence is there for Bronze Age and Iron Age occupation.

- *What evidence is there for Saxon and Medieval occupation in the area?*

5.1.6 There was no evidence for Saxon and Medieval occupation.

- *What evidence is there for archaeological remains present relating to Chobham Manor?*

5.1.7 There was no evidence for Chobham Manor.

- *What is the impact of the railway construction on the historic environment?*

5.1.8 The 19th century railway works has had a major impact on the local historic environment existing from the 1840's to the 1960's, and has probably truncated any earlier remains.

- *What are the latest deposits identified?*

5.1.9 All the deposits appear to be 19th century in date

- *What is the extent of modern truncation?*

5.1.10 There is approximately 1.0m of deposits associated with the modern car park. There is some truncation of the archaeological remains caused by recent test pits as well as some undated holes cutting through the concrete surfaces. In Trench 2 the west end showed extensive modern dumping, that was probed to c 4.90m OD, and is probably associated with the modern railway lying to the west of the site.

5.2 General discussion of potential

5.2.1 The evaluation has shown that the potential for survival of ground surfaces (horizontal archaeological stratification above natural ground) on the site is good though is limited to the known 19th century railway works and its infrastructure. The railway tracks found in the evaluation overlaid with the 1867 OS map can be seen in Fig 8.

5.2.2 The average depth of archaeological deposits where they do survive is likely to be around 0.50–0.75m.

5.3 Significance

5.3.1 Whilst the archaeological remains are of low local significance there is nothing to suggest that they are of regional or national importance.

5.4 Assessment of the evaluation

5.4.1 There is a high level of confidence in the results obtained by this evaluation as the trenches cover most of the site. Other than the 19th century railway works there does not appear to be any archaeology earlier than this date.

6 Proposed development impact and conclusions

- 6.1.1 The proposed redevelopment at the site involves creating a new residential-led neighbourhood with associated landscaping. This will have an impact on any surviving below ground deposits as it will require new piles and ground beams.
- 6.1.2 Taking into account the results in the trenches 19th century railway lines and other infrastructure survive across most of the site. The exception is the area around Trench 1 where no railway lines were found despite the historic maps indicating their presence. As no other archaeology was noted it seems likely the 19th century railway 'Stratford Works' has truncated any earlier archaeological remains.
- 6.1.3 Due to the fact that no finds and only the uniform sequence of 19th century railway lines was found across the site; it is unlikely significant remains will be present to further answer the original research aims. Therefore it is deemed that there would be no value in any further archaeological work; and therefore the archaeological condition for Zone 2 can be considered satisfied.

7 Acknowledgements

- 7.1.1 The author would like to thank Nick Nickolou and Rory Turnbull at Higgins Construction for their assistance during the evaluation work. Also thanks to Mark Burch (geomatics), Sasathorn Charoenphan, Howard Burkhill and Sean Russell for their assistance on site. The project was managed by Harry Clarke at MOLA.

8 Bibliography

Chartered Institute for Archaeologists, (CIFA), 2014 *By-Laws, Standards and Policy Statements of the Chartered Institute for Archaeologists, Standard and guidance: field evaluation*

Chartered Institute for Archaeologists (CIFA), supplement 2014, *By-Laws, Standards and Policy Statements of the Chartered Institute for Archaeologists: Standards and guidance: the creation, compilation deposition and transfer of archaeological archives*

Historic England Greater London Archaeology Advisory Service, 2015 *Guidelines for Archaeological Projects in Greater London*

MOLA, 2017, *Written Scheme of Investigation for an archaeological evaluation Land at Zone 2 Chobman Farm, Leyton Road, Stratford E15*, MOLA unpub report

Museum of London, 2002 *A research framework for London archaeology 2002*

PCA, 2010, *An Archaeological Assessment of Land at the Stratford City Development, Stratford zones 3 to 6* PCA unpub report

Grosso, I and Thompson, G 2015, 'The Stratford Railway Workshops: From the Eastern Counties Railway to the Chobham Farm Container Depot. Excavations at Angel Lane, Stratford' in *London's Industrial Archaeology* No 13, GLIAS

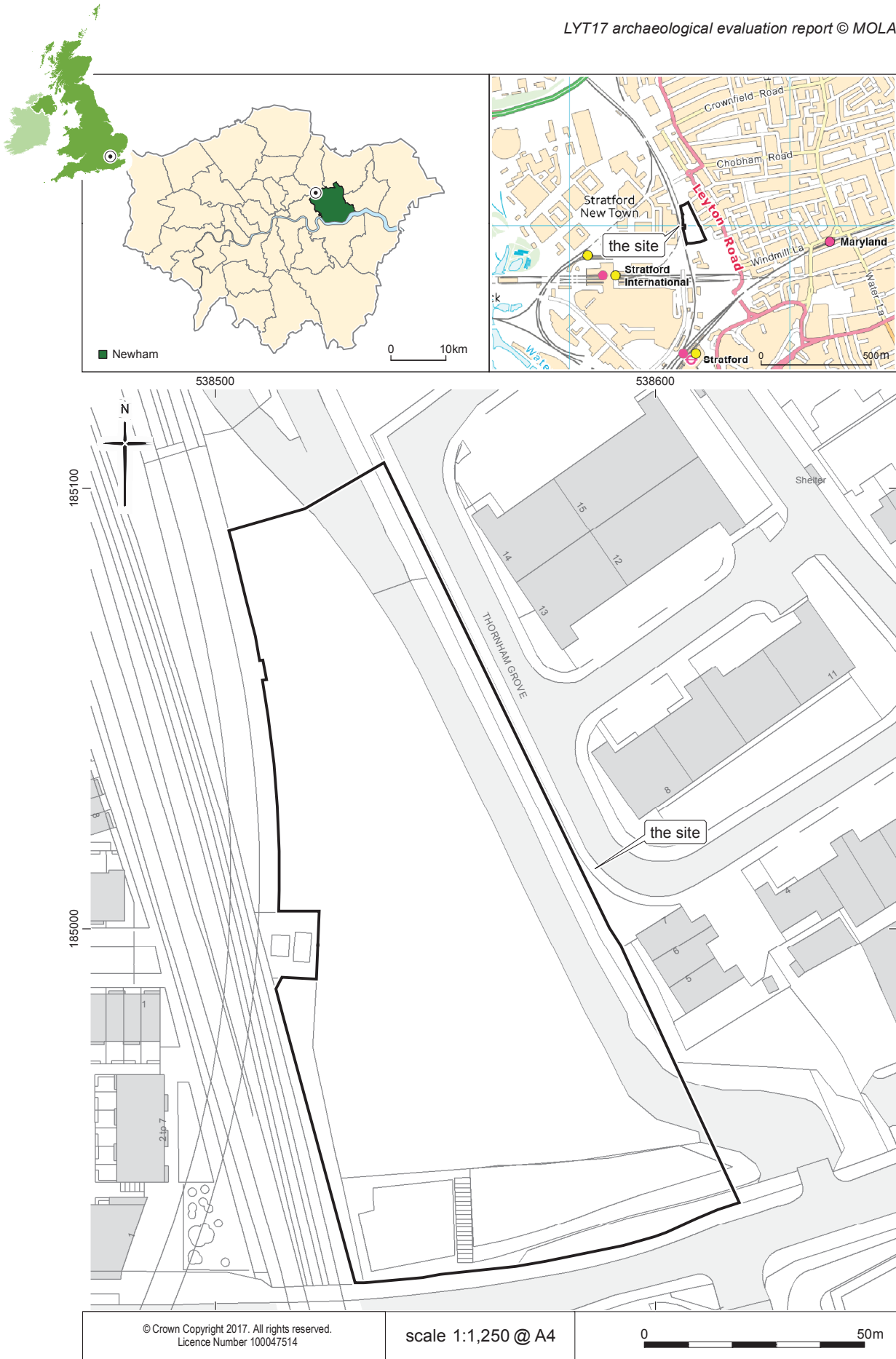


Fig 1 Site location

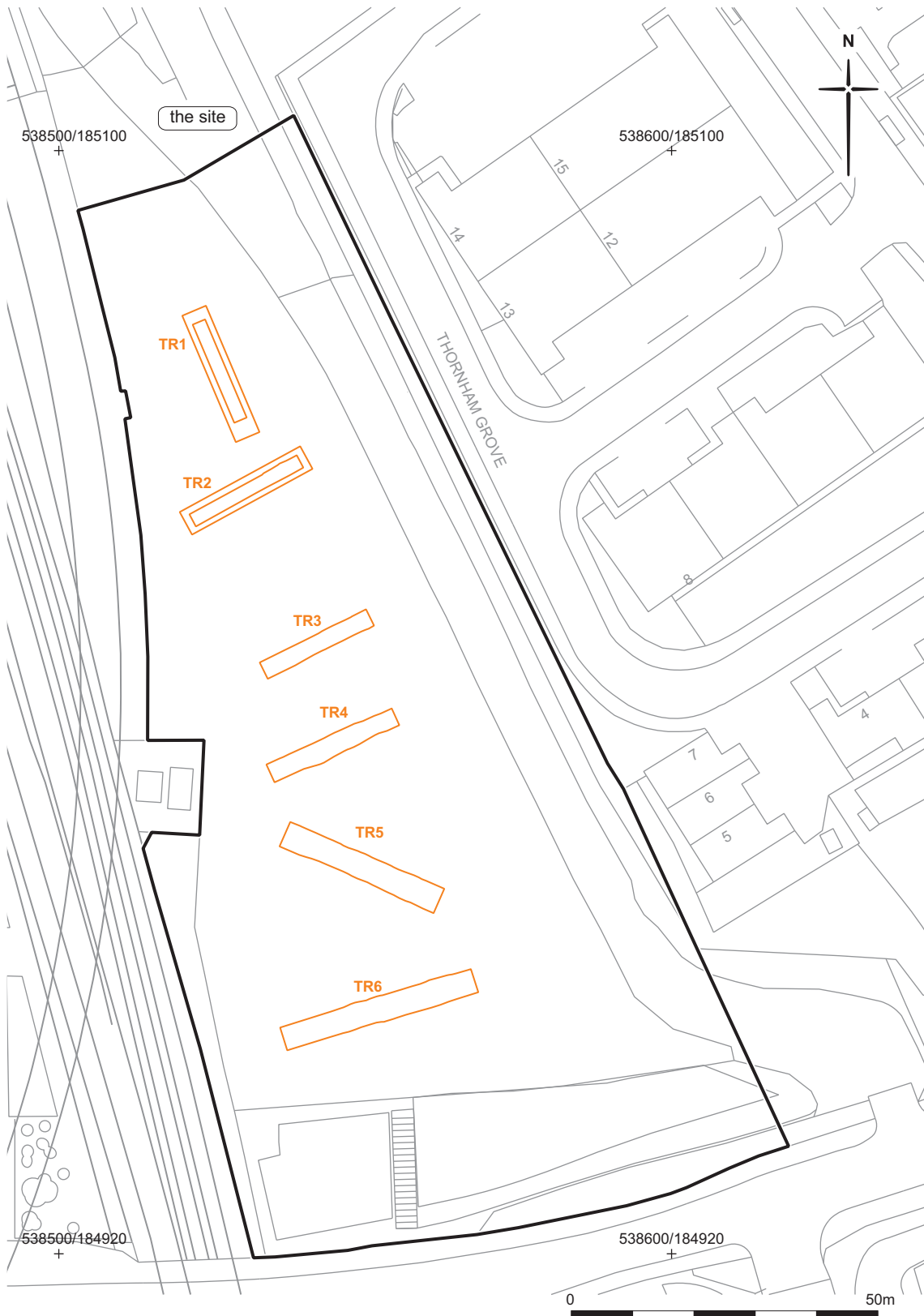


Fig 2 Areas of investigation

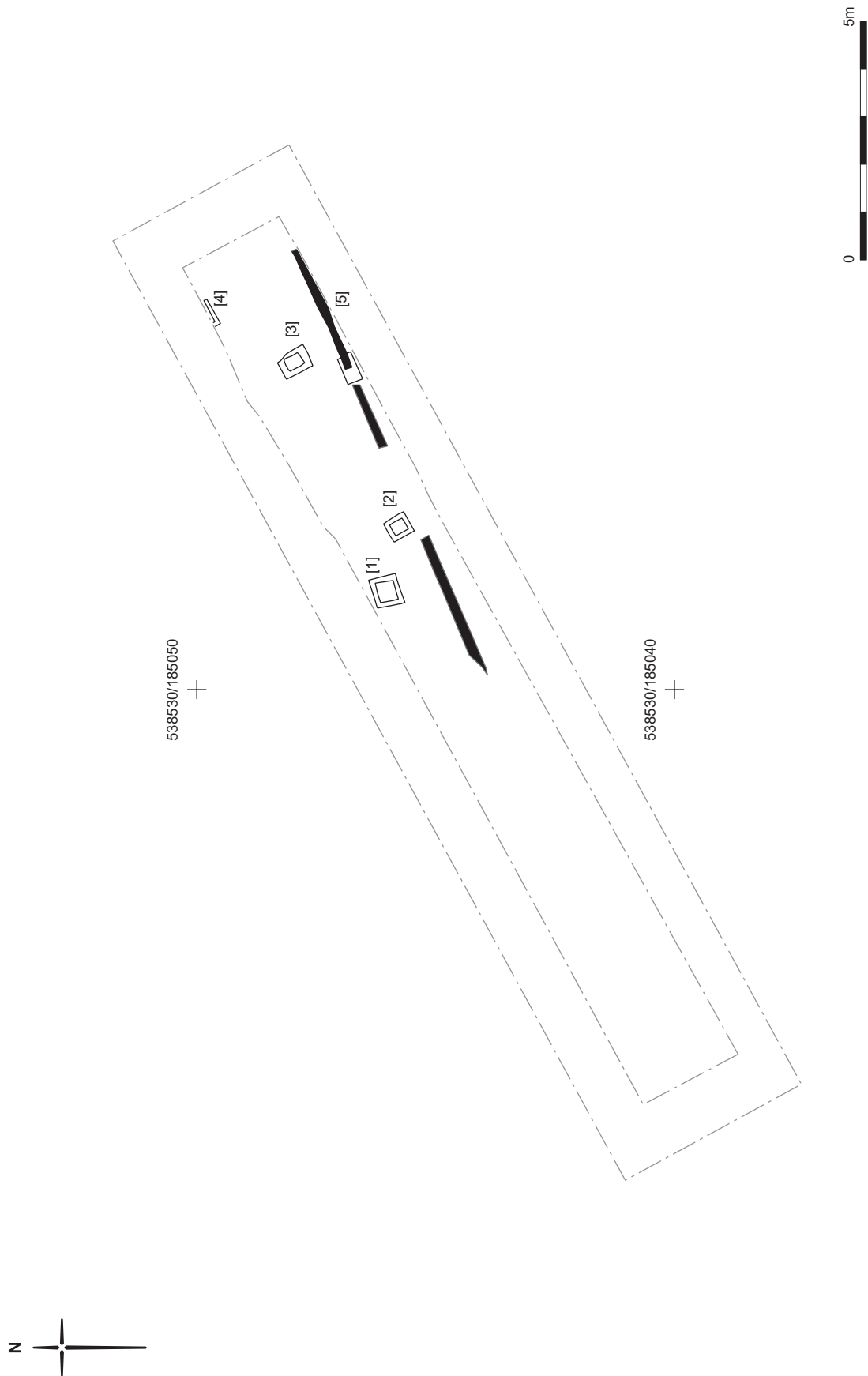


Fig 3 Trench 2

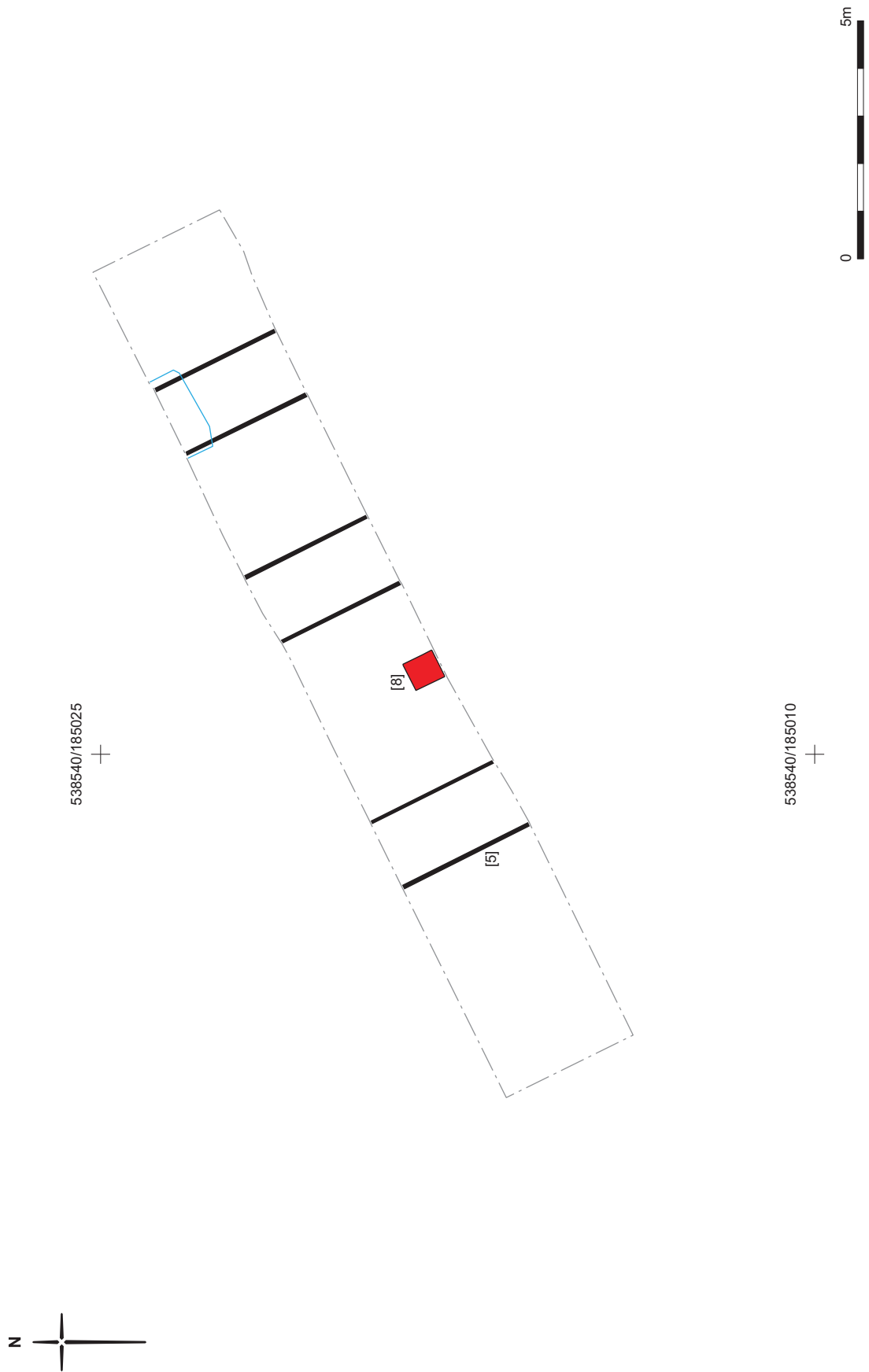


Fig 4 Trench 3

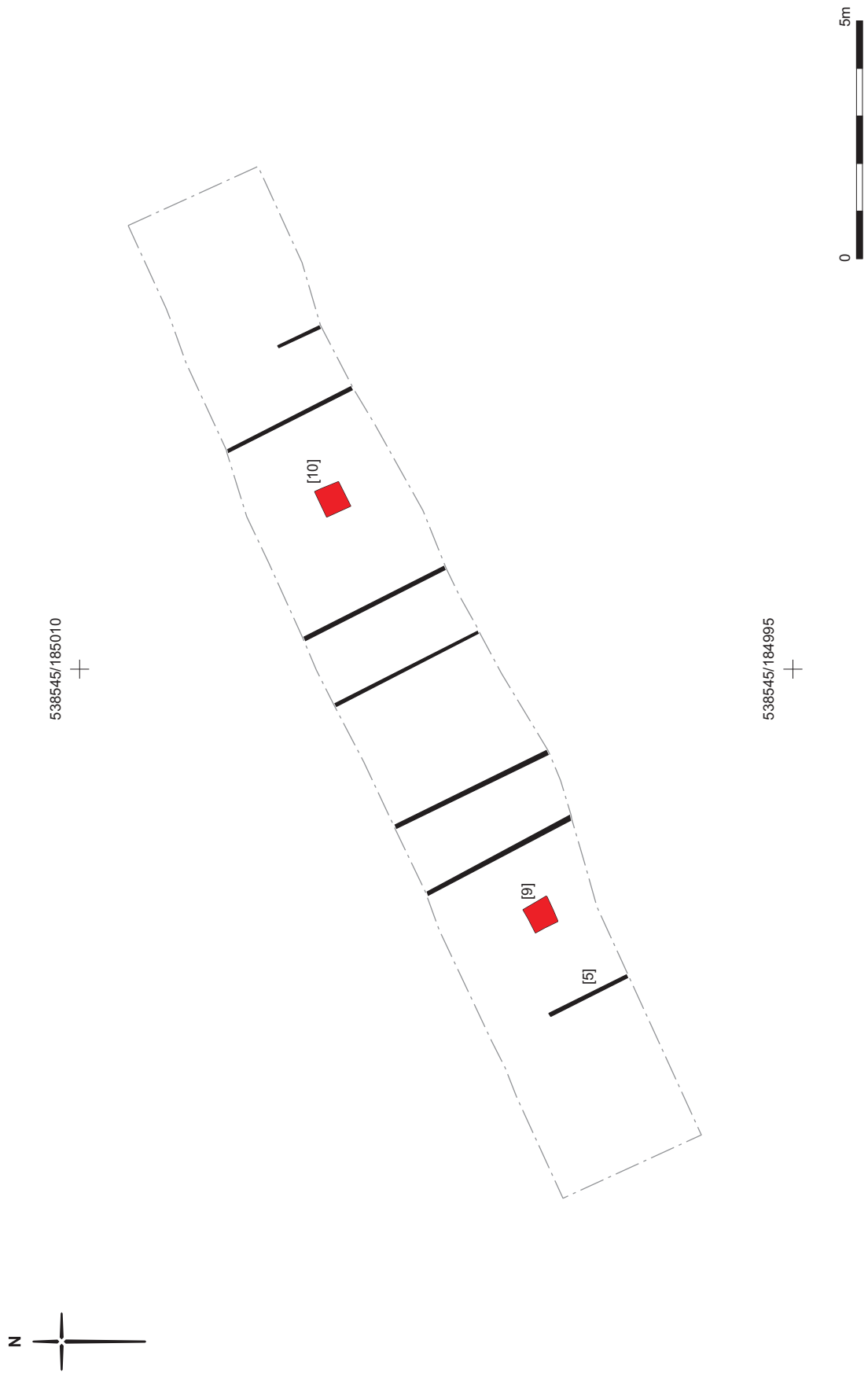


Fig 5 Trench 4

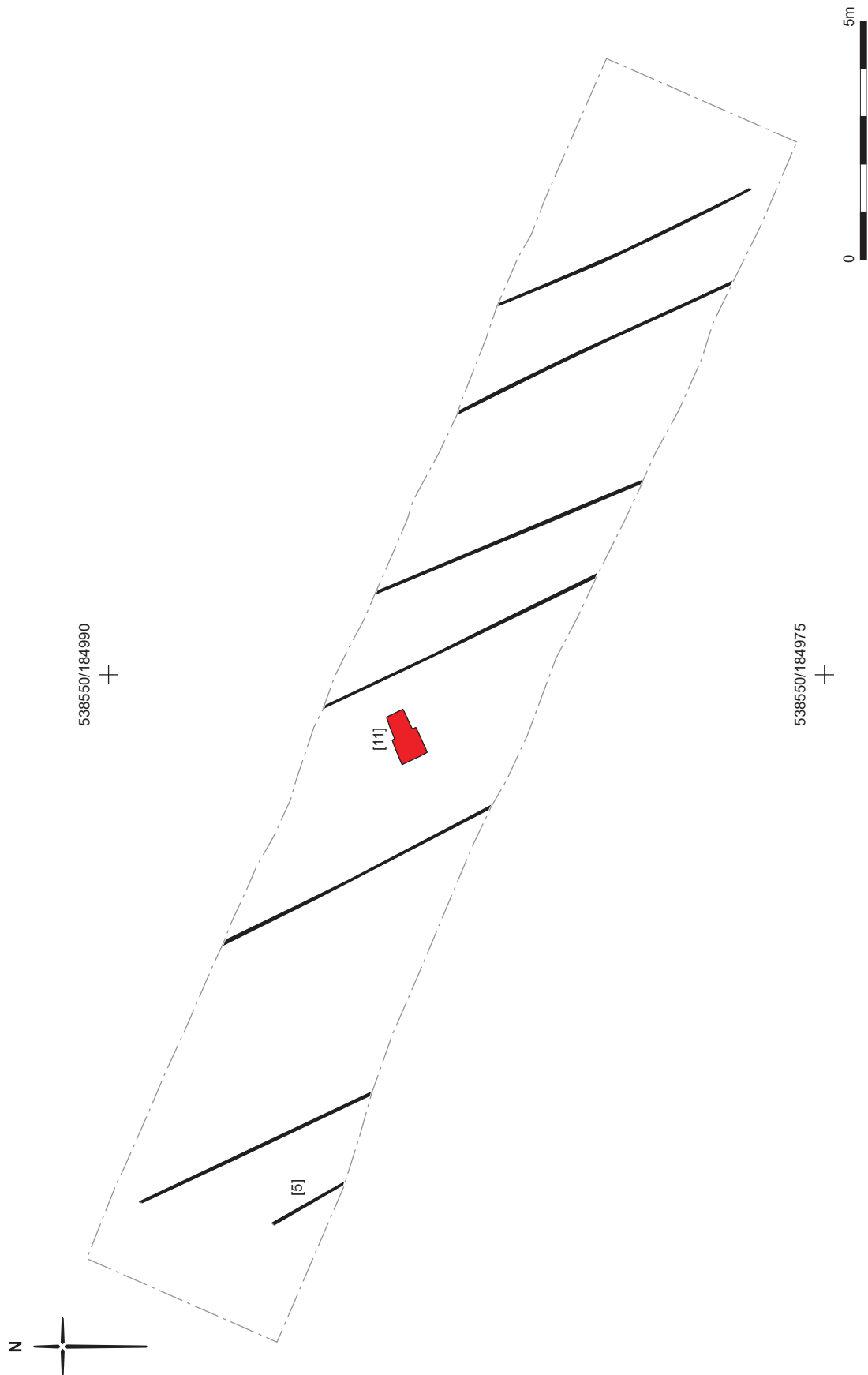


Fig 6 Trench 5

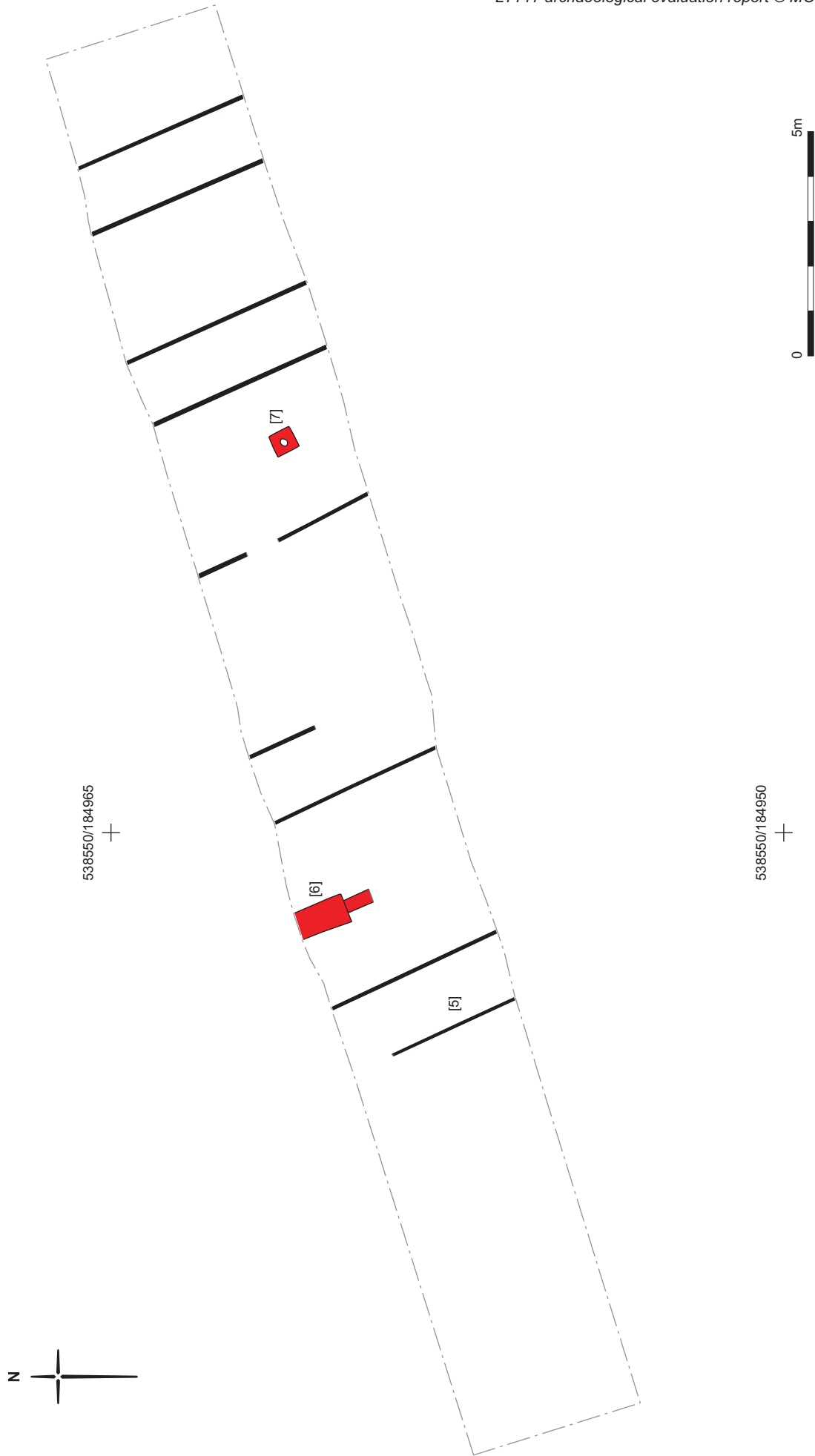


Fig 7 Trench 6

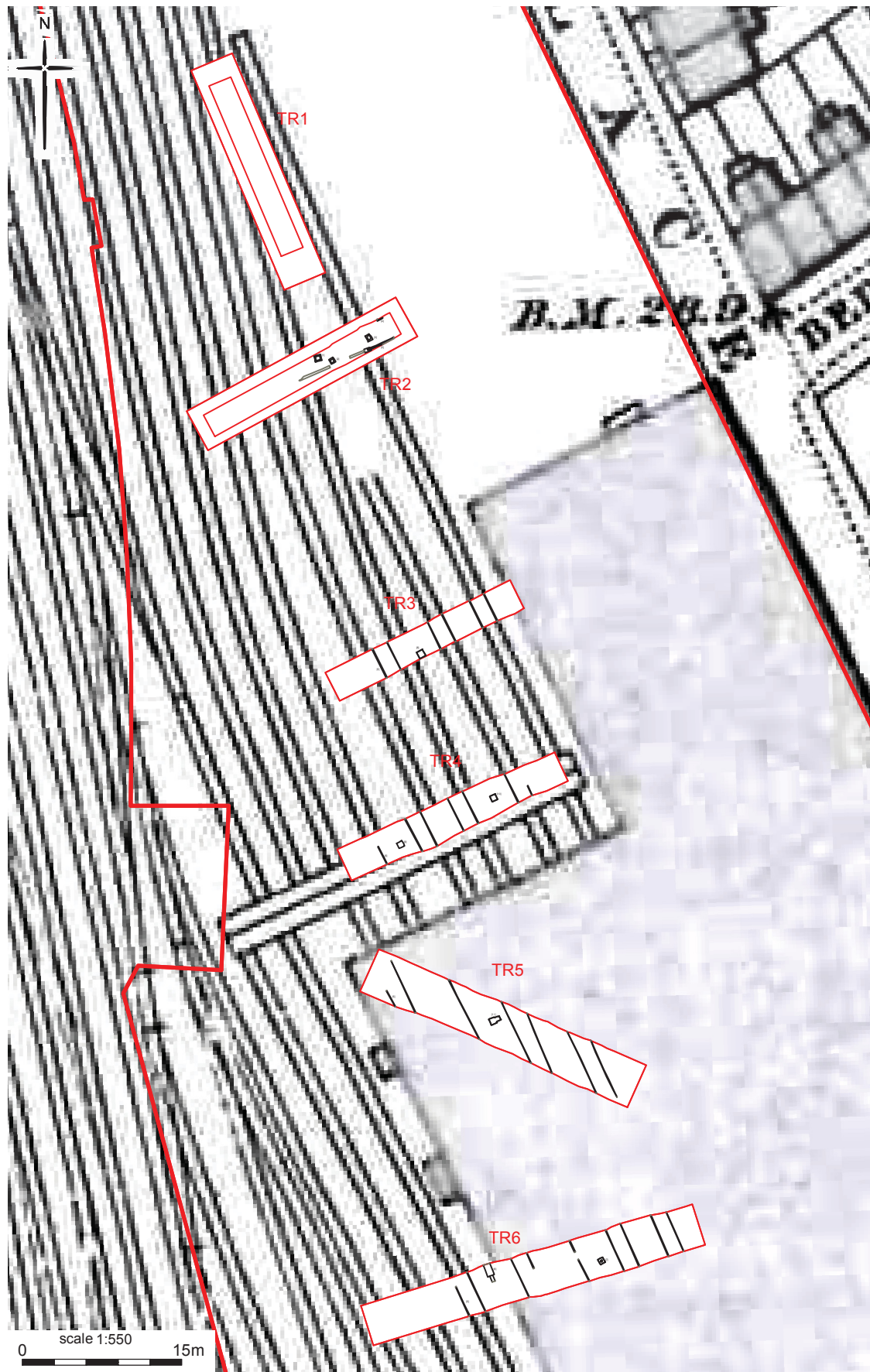


Fig 8 Railway tracks found in the evaluation with OS 1867 map overlaid

9 OASIS archaeological report form

OASIS ID: molas1-293875

Project details

Project name	Land at Zone 2, Chobham Farm, Leyton Road, Stratford E15
Short description of the project	Six evaluation trenches were excavated on the site between 31 July and 18 August 2017. The evaluation found extensive railway tracks and other infrastructure that form part of the 19th century 'Stratford Works' that began in the 1840's and continued into the 1960's.
Project dates	Start: 31-07-2017 End: 18-08-2017
Previous/future work	No / Not known
Any associated project reference codes	LYT17 – Site code
Type of project	Field evaluation
Site status	None
Current Land use	Transport and Utilities 2 - Other transport infrastructure
Monument type	RAILWAY Post Medieval
Methods & techniques	"Sample Trenches"
Development type	Car park (flat)
Prompt	Planning condition
Position in the planning process	After full determination (eg. As a condition)

Project location

Country	England
Site location	GREATER LONDON NEWHAM STRATFORD Land at Zone 2, Chobham Farm, Leyton Road, Stratford
Postcode	E15
Study area	11700 Square metres
Site coordinates	TQ 38552 84999 51.546354917266 -0.001627517084 51 32 46 N 000 00 05 W Point
Height OD / Depth	Min: 4.75m Max: 5.12m

Project creators

Name of Organisation	MOLA
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Project brief originator	MOLA project manager
Project design originator	Harry Clarke
Project director/manager	Harry Clarke
Project supervisor	Tony Mackinder
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Higgins Construction

Project archives

Physical Archive Exists?	No
Physical Archive recipient	Museum of London Archaeological Archive
Physical Archive ID	LYT17
Digital Archive recipient	Museum of London Archaeological Archive
Digital Archive ID	LYT17
Digital Media available	"Images raster / digital photography", "Survey", "Text"
Paper Archive recipient	Museum of London Archaeological Archive
Paper Archive ID	LYT17
Paper Media available	"Context sheet", "Diary", "Photograph", "Plan", "Report"

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
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Author(s)/Editor(s)	Mackinder, T
Date	2017
Issuer or publisher	MOLA
Place of issue or publication	London
Description	A4 client report with figs and photos

Entered by Tony Mackinder (tmackinder@mola.org.uk)
Entered on 23 August 2017

OASIS:

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